



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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4/23/01  
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In re Application of

Group Art Unit: 1714

Takeshi KONDO, et al.

Examiner: Frederick G. Dean

Serial No. 09/322,333

Filed: May 28, 1999

For: Pressure Sensitive Adhesive Sheet and Method of Use  
thereof

Honorable Commissioner of Patents and Trademarks  
United States Patent and Trademark Office  
Washington, D. C. 20231

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APR 23 2001  
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Sir:

DECLARATION UNDER 37 CFR 1.132

We, Takeshi Kondo and Kouichi Nagamoto, declare and state  
that:

1.1. I, Takeshi Kondo, was graduated from the graduate school  
of University of Shinshu, Engineering Department, majoring in  
new material develop chemistry and received a degree of Master  
of Engineering, in March 1994.

Since April 1994, I have been an employee of Lintec  
Corporation. From 1995, I have been engaged in the  
research and development work concerning new material for  
electric/communication device field.

I am a co-inventor of the invention described in  
the above-identified application.

1.2. I, Nagamoto Kouichi, was graduated from the graduate school of Kyushu Institute Technology, Engineering Department, majoring in material engineering and received a degree of Master of Engineering, in March 1995.

Since April 1995, I have been an employee of Lintec Corporation. Till the present time, I have been engaged in the research and development work concerning new material for electric/communication device field.

I am a co-inventor of the invention described in EP 0 798 355.

2. We carried out the following experiment in order to demonstrate the superiority of the process according to the present application.

Example 1 of EP 0 798 355 was reproduced to prepare base sheet. The value " $\tan \delta$ " of resulting base sheet was measured in accordance with the method described in the present specification.

Results are summarized in the following table together with Examples 1 to 3 of the present specification.

Data plots are attached herewith.

	Urethane Acrylate Oligomer	Monomer	Photoinitiator	Max. value of $\tan \delta$ (-5~80°C)	$\tan \delta$ at temperature of							Back grinding aptitude
					0°C	25°C	40°C	50°C	60°C	70°C	80°C	
USSN.09/322,333 Example 1	Arakawa Chem. Ind. Urethane oligomer Mw=5000 [50p.h.r.]	Isobornyl acrylate [50p.h.r.]	Irgacure 184 [2p.h.r.]	0.78	0.15	0.31	0.52	0.71	0.78	0.65	0.52	Good
USSN.09/322,333 Example 2		Morpholinyl acrylate [50p.h.r.]			0.08	0.19	0.33	0.5	0.69	0.84	0.84	
USSN.09/322,333 Example 3		Isobornyl acrylate [25p.h.r.] Morpholinyl acrylate [25p.h.r.]			0.08	0.26	0.53	0.86	1.08	1.0	0.68	
BP 0 798 355 Example 1	Nippon Kayaku Co. Urethane oligomer UX3301, Mw=8000 [60p.h.r.]	Morpholinyl acrylate [40p.h.r.]	Irgacure 184 [4p.h.r.]	0.69	0.09	0.15	0.21	0.27	0.36	0.52	0.69	dimpled

4. From the results of the above Experiment and based on our best knowledge and experience in this field, we conclude that the base sheet prepared in Example 1 of EP 0 798 355 had maximum value of dynamic viscoelasticity  $\tan \delta$  of 0.69 which does not satisfy the invention claimed in the amended claims, and is inferior in "back grinding aptitude". Thus, unexpected effects attained by the present invention are clearly demonstrated by the above experimental work.

The undersigned declare further that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

This 11<sup>th</sup> day of April, 2001

Takeshi Kondo

Takeshi KONDO

This 11<sup>th</sup> day of April, 2001

Kouichi Nagamoto

Kouichi NAGAMOTO

[E]  
dyne/cm<sup>2</sup>

$\tan \delta \times E' \circ E'' \Delta$

98/4/16  
KONDO  
507L/50

米国特許出願  
No.09/322,333  
実施例 1

USSN 09/322,333  
Example 1

[tan]

E10

1.0

E 9

0.1

E 8

.01

-20

4

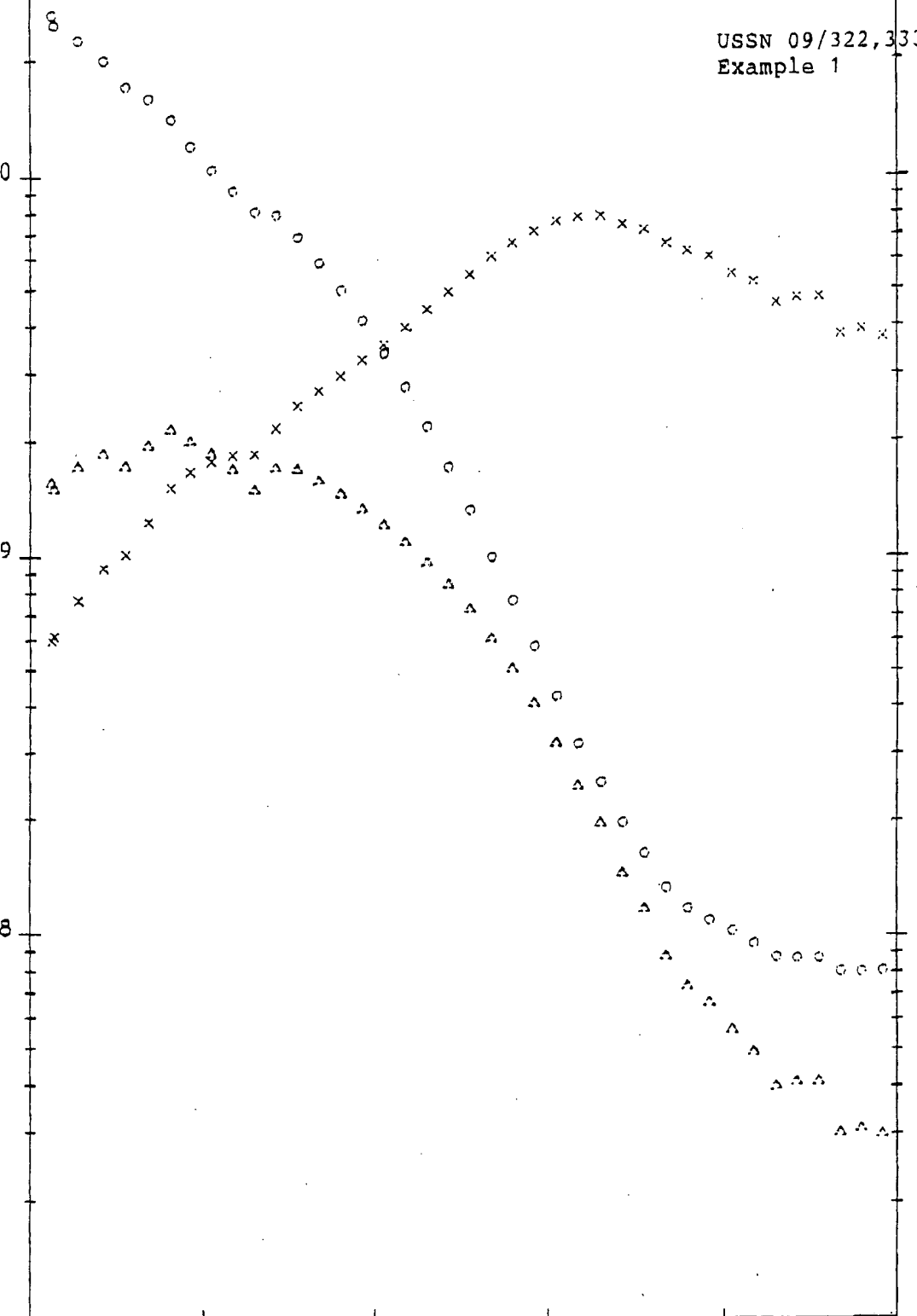
28

52

76

100

[TEMP.] (°C)



[E]  
dyne/cm<sup>2</sup>

$\tan \delta \times E' \circ E'' \Delta$

98/3/9  
KONDO  
Y-2

米國特許出願  
No.09/322,333  
實施例 2

USSN 09/322,333  
Example 2

E10

E 9

E 8

[tan]

1.0

0.1

.01

-20

4

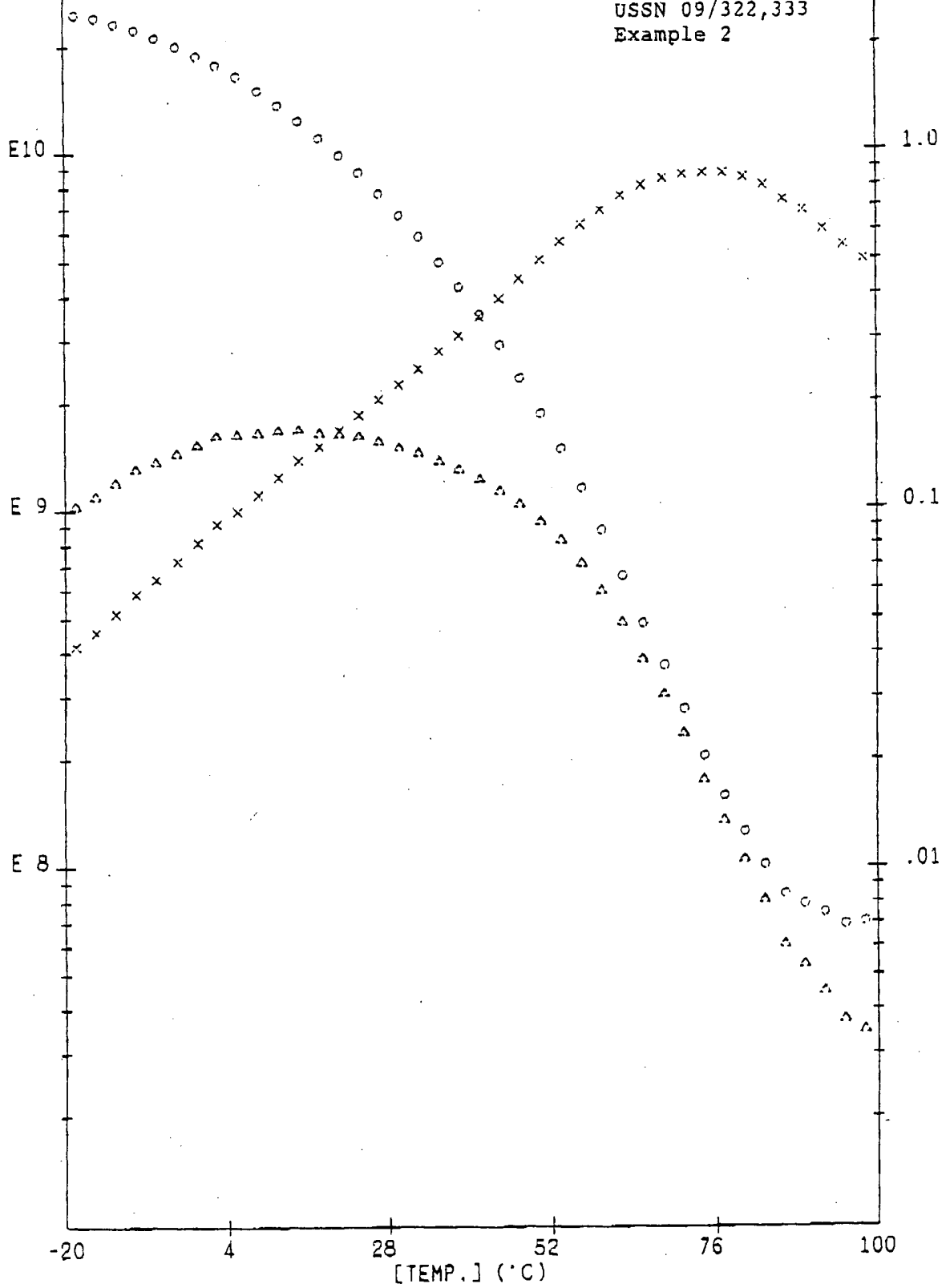
28

52

76

100

[TEMP.] (°C)



[E]  
dyne/cm<sup>2</sup>

$\tan \delta \times E''$

93/4/10  
KONDO  
S07L/25

[tan]

米国特許出願  
No.09/322,333  
実施例 3

USSN 09/322,333  
Example 3

E10

1.0

E9

0.1

E8

.01

-20

4

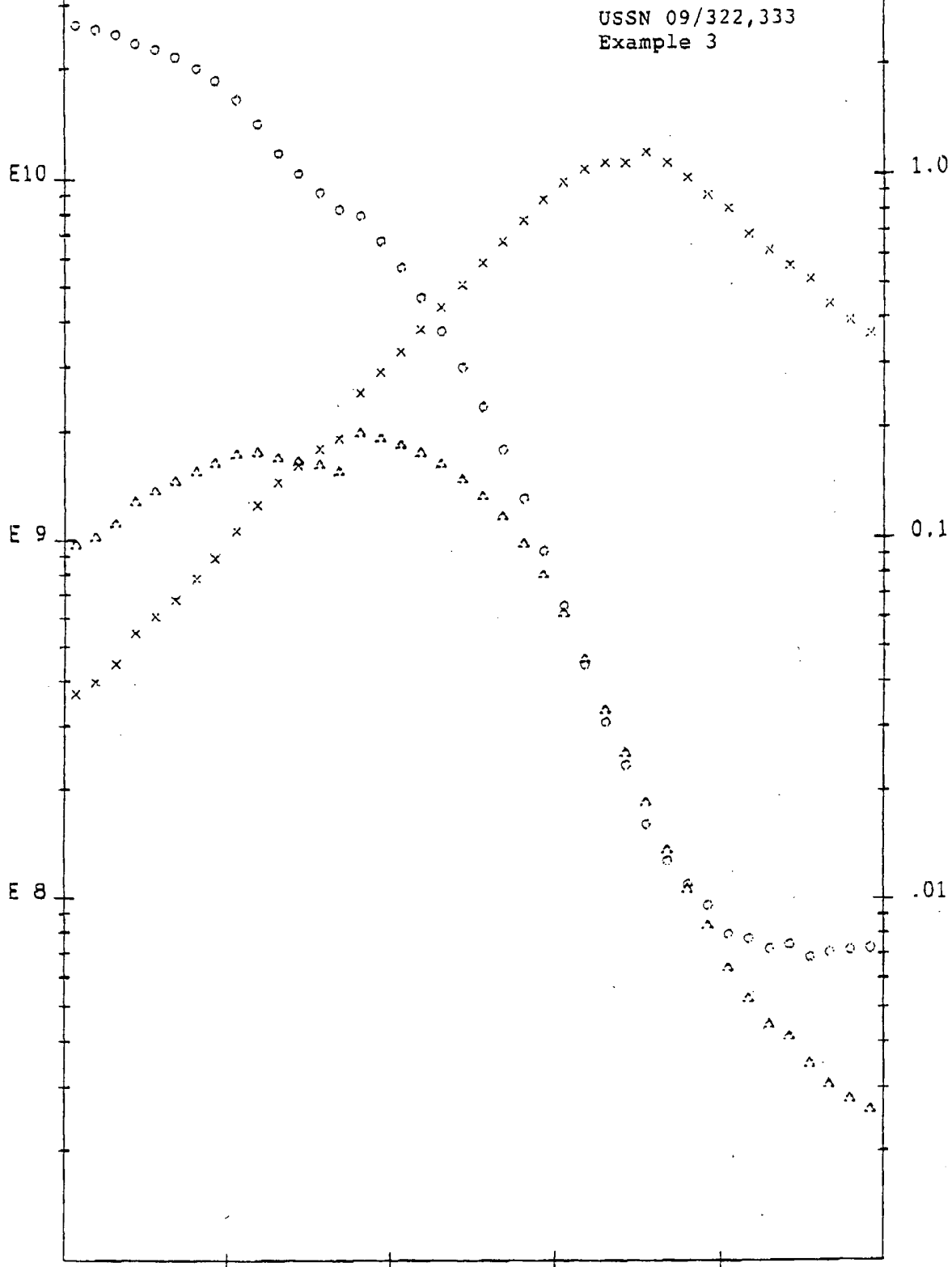
28

52

76

100

[TEMP.] (°C)



[E]  
dyne/cm<sup>2</sup>

$\tan \delta \times E' \circ E'' \Delta$

01-03-28

KUBOTA

UL1

[tan]

引例：特開平

9-253964 号対応

EP

実施例 1

EP corresponding to JP-A

9-253964

Example 1

E10

1.0

E 9

0.1

E 8

.01

-20

4

28

52

76

100

[TEMP.] (°C)

